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| UTC Project Information | |
| Project Title | Effects of COVID-19 Lockdown on Air Quality and Mortality across Continental United States – A Data Driven Approach |
| University | Texas A&M University |
| Principal Investigator | Rohit Jaikumar |
| PI Contact Information | Rohit Jaikumar  Associate Transportation Researcher  Environment & Air Quality Division  Texas A&M Transportation Institute  r-jaikumar@tti.tamu.edu |
| Funding Source(s) and Amounts Provided (by each agency or organization) | Center for Advancing Research in Transportation Emissions, Energy, and Health (CARTEEH):  CARTEEH: $ 50000  Other Sources: $ |
| Total Project Cost | $ 50000 |
| Agency ID or Contract Number | 69A3551747128 |
| Start and End Dates | January 2021 to September 2021 |
| Brief Description of Research Project | This study aims to integrate observational air quality data from EPA and other state agencies monitoring networks with satellite data and epidemiological studies to quantify, on short-term and long-term scales, the health benefits of the lockdown measures imposed in response to the COVID-19 pandemic. The research team will analyze the role of different emission sectors and systems as well as the role of meteorology in contributing to the observed decrease in PM2·5 concentrations.  The research team will compare the mortality burden from COVID-19 to the avoided deaths resulting from improved air quality. In addition, the human, social, and political dynamics leading to different risk perceptions associated with the COVID-19 pandemic versus a global environmental crisis will be explored, and the implications of these differences for policy making. |
| Describe Implementation of Research Outcomes (or why not implemented)  Place Any Photos Here | The project will result in a visualization dashboard showing the spatial mortality estimates across United States. The users will be able to explore the different trends at monthly/quarter level. The dashboard will be made using Power BI/ Tableau and will be hosted on the CARTEEH data hub. |
| Impacts/Benefits of Implementation (actual, not anticipated) | The dashboard will help policy makers/ stakeholders make decision towards the air quality impacts of the economic recovery from the COVID-19 pandemic using different scenarios. |
| Web Links   * Reports * Project website |  |